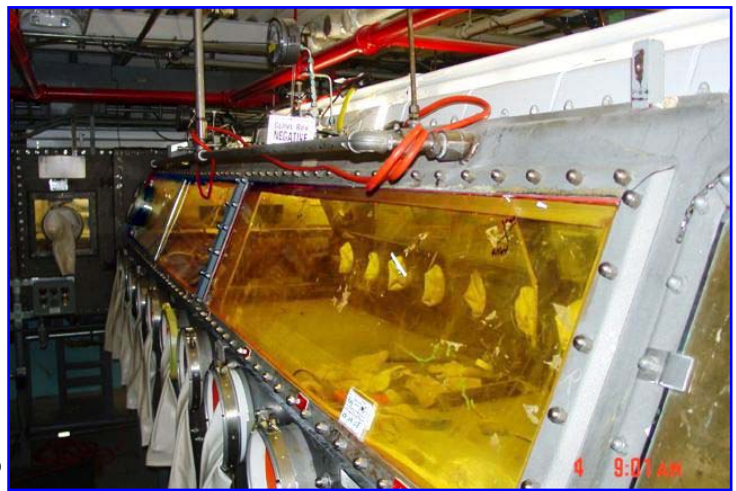


# **Nuclear Material Stabilization and Disposition (RL-0011)**

**D. B. Klos, Vice President of  
Plutonium Finishing Plant Closure Project/  
(509) 373-3574**



**Glovebox HA-20MB**



**Glovebox HC-3**

**Deactivation and Decommissioning of Ancillary Facilities and Legacy  
Plutonium Hold-up removal at the Plutonium Finishing Plant**

## Overview

This section addresses work in Project Baseline Summary RL-0011, *Nuclear Material Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of October 2004.

## Notable Accomplishments

### Disposition the Plutonium Finishing Plant (PFP) Facility

PFP completed Resource Conservation and Recovery Act closure of glovebox HA-20MB 18 months ahead of the March 31, 2006, baseline date.

Chemicals and equipment have been removed from 22 hoods and gloveboxes in the Standards and Analytical Laboratories. The decontamination of these hoods and gloveboxes will support the initial ten-percent increment to remove or decontaminate to low-level waste criteria 189 plutonium (Pu)-contaminated gloveboxes and hoods.

Mobile Office 273 outside the PFP Protected Area (PA) has been accepted for occupancy. Initial personnel moves are expected to begin in early November.

The new laydown storage area outside the PA has been completed and turned over to plant staff for unconditional use.

PFP completed legacy Pu hold-up removal on gloveboxes HA-9A (phase 1), HC-3 and the HC-5 conveyor. PFP initiated hold-up removal in the MT-4 glovebox. PFP is currently 42 percent complete on Pu hold-up removal disposition.

Workers have devised a number of unique tools that improve safety and efficiency while reducing radiation doses. These inventions include a collapsible sleeve that can be fitted over glass tanks that hang inside gloveboxes, a hard plastic glove port extender, a specially designed auger for cleaning out pipes, a glovebox window polisher, and various "pouches" fabricated to fit specific contaminated items.

## Issues

**Special Nuclear Material (SNM) De-inventory Delay:** Authorization to allow shipment of Hanford Pu to the Savannah River Site (SRS), due August 30, 2004, has not been received. The continued delay in authorization to ship will result in a delay in completion of the SNM de-inventory of the PFP complex. The Record of Decision, a key document required by DOE prior to issuing the authorization for Hanford to ship SNM to SRS, is not expected until after November 2004.

## Anticipated FY 2005 FH Funds (\$M)

	FY 2005 Anticipated Funding w/Carryover
Nuclear Materials Stabilization & Disposition	\$ 227.2

## FY 2005 Schedule/Cost Performance (\$M)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Nuclear Materials Stabilization & Disposition	\$13.4	\$10.7	\$11.0	-\$2.7	-20.1%	-\$0.3	-2.7%	\$215.0

Numbers are rounded to the nearest \$M and include the closure services allocation.

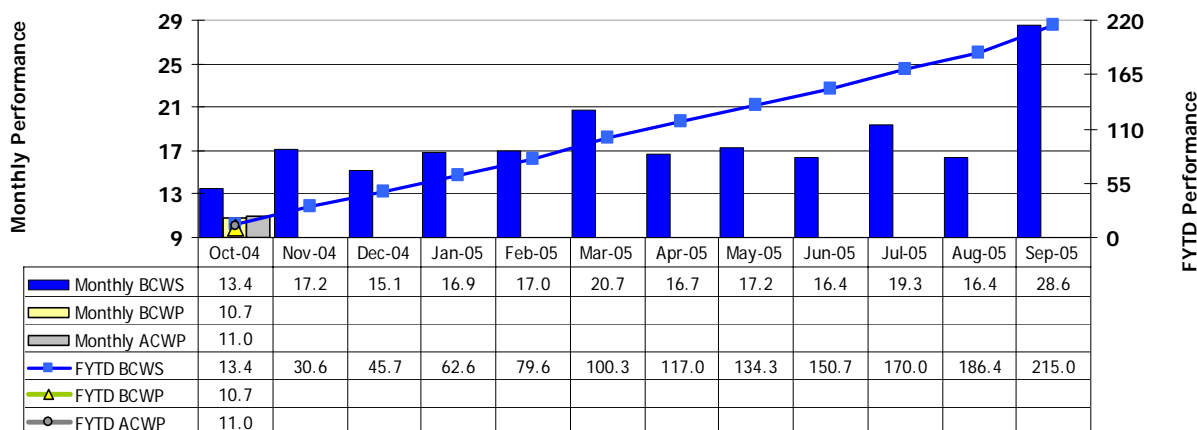
**Schedule Performance (-\$2.7M/-20.1%):** Primary contributors to the unfavorable schedule performance include:

- Delay in packaging and shipment of SNM due to lack of authorization to ship;
- Deactivation and decommissioning (D&D) activities are behind schedule due to delays in 232-Z D&D, legacy Pu holdup removal and 236-Z canyon entry tasks for sampling and crane readiness resulting from 232-Z decontamination efforts and the fissile material movement hold;
- Earned value on transition operation support apportioned to delayed D&D work scope and being behind schedule on facility modifications; and
- Significant delays in solid waste disposal activities due to delayed D&D activities (i.e., waste forecast higher than re-sequenced D&D work output).

This negative schedule variance is partially offset by ahead-of-schedule progress on D&D activities to transition 234-5Z.

**Cost Performance (-\$0.3M/-2.7%):** The cost performance is within the reporting threshold.

### Performance Analysis FYTD and Monthly (\$M)



## Milestone Achievement

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-05-501 TRP-05-506	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA PI	6/30/05		6/30/05	On Schedule
TRP-05-504	Remove and Disposition Pu Holdup in Process Equipment at PFP	PI	9/30/05		7/31/05	Ahead of Schedule
TRP-05-505	Transition 10 Facilities to Slab-on-Grade	PI	9/30/05		7/31/05	Ahead of Schedule
TRP-06-500	Decontaminate Glovebox HA-20MB	PI	3/31/06	10/28/04		Complete
TRP-05-503	Complete Deinventory of DOE-STD-3013 Containers & Unirradiated Fuel by Shipment to SRS or Other Approved Location	PI	9/30/06		TBD	Will be Impacted due to Delayed Authorization to Ship
TRP-06-501	Complete 100% Legacy Pu Holdup Removal and Disposition	TPA	9/30/06		7/31/05	Ahead of Schedule
TRP-06-503	Remove Remaining SNM From PFP Such That Protected Area Not Required	PI	9/30/06		TBD	Will be Impacted due to Delayed Authorization to Ship
TRP-06-509	Disposition Miscellaneous PFP Nuclear Materials	PI	9/30/06		TBD	Will be Impacted due to Delayed Authorization to Ship
TRP-06-510	Transition 241-Z/ZA Facility to Demolition Ready	PI	9/30/06		9/30/06	On Schedule
TRP-06-511	Remove or Decontaminate 236-Z Pencil Tanks	PI	9/30/06		9/30/06	On Schedule
TRP-06-512	Remove or Decontaminate the 236-Z Process Equipment in Rooms 50 & 60	PI	9/30/06		9/30/06	On Schedule
TRP-06-513	Remove or Decontaminate the Remaining 236-Z Process Equipment	PI	9/30/06		9/30/06	On Schedule
TRP-06-514	Remove or Decontaminate 189 Gloveboxes and Hoods in 234-5Z	PI	9/30/06		9/30/06	On Schedule
TRP-06-515	Complete 242-Z Initial Entry & Characterization	PI	9/30/06		9/30/06	On Schedule
TRP-06-516	Cleanout Pu & Am Contaminated Gloveboxes and Tanks in 242-Z	PI	9/30/06		9/30/06	On Schedule
TRP-06-517	Dispose of Approximately 600 Pu Nitrate Containers at PFP	PI	9/30/06		9/30/06	On Schedule
TRP-06-502 TRP-06-507	Transition 232-Z Bldg Incinerator to Slab-on-Grade	TPA PI	9/30/06 3/31/06		2/28/06	Ahead of Schedule